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$$HO$$
 N
 O
 O
 F
 CN

$$\begin{array}{c|c} HO \\ \\ HO \\ \end{array}$$

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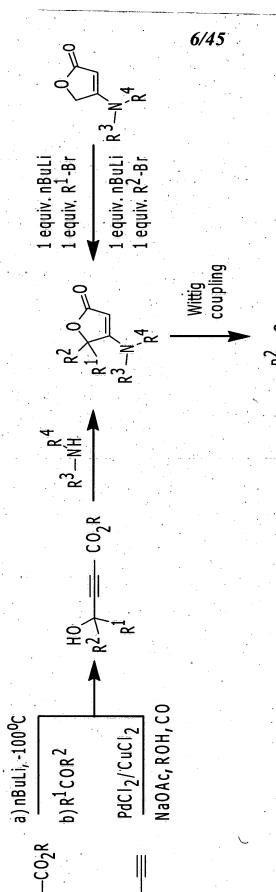
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Fig.2F.

HO
$$S$$
 S S F_3 C N C F_3 F_3 F_4 F_5 F

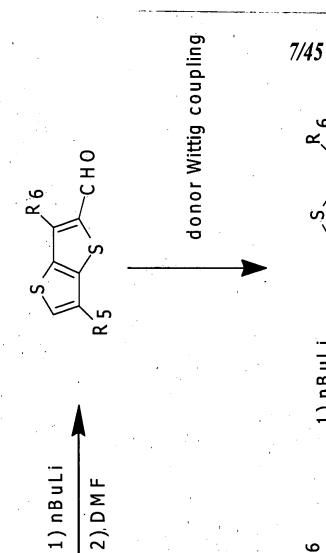
Fig.2H.

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≃ 1) nBuli 2) DMF

9 ~ OHO

 $\mathsf{R}^{\mathsf{S}}\mathsf{M}\,\mathsf{g}\mathsf{X}$

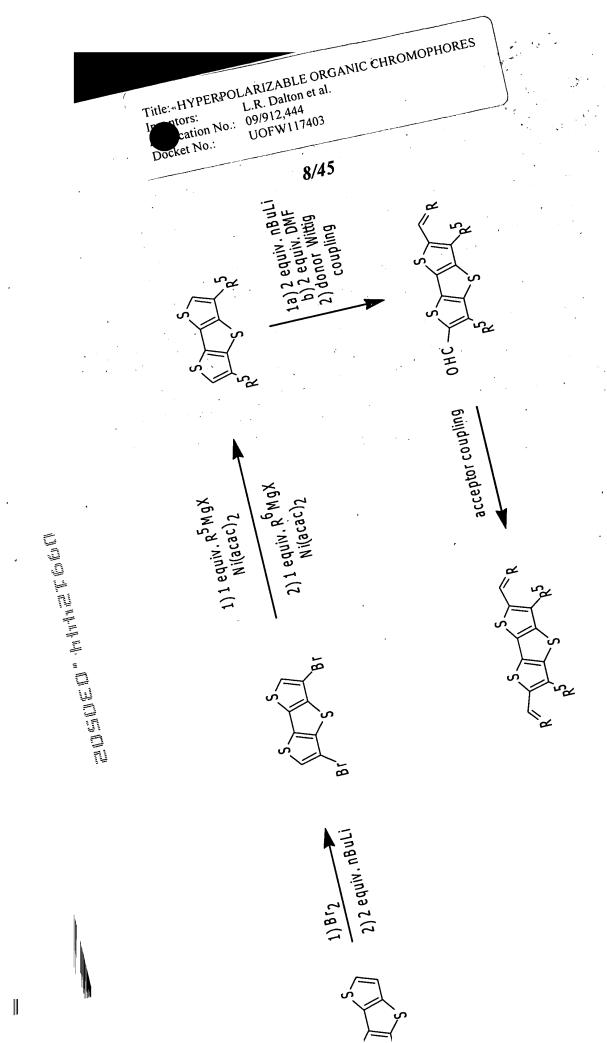
R 6

MgX

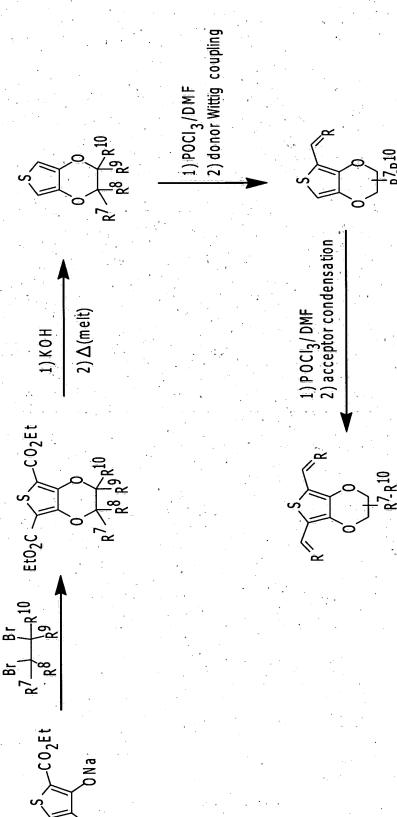
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acceptor

condensation



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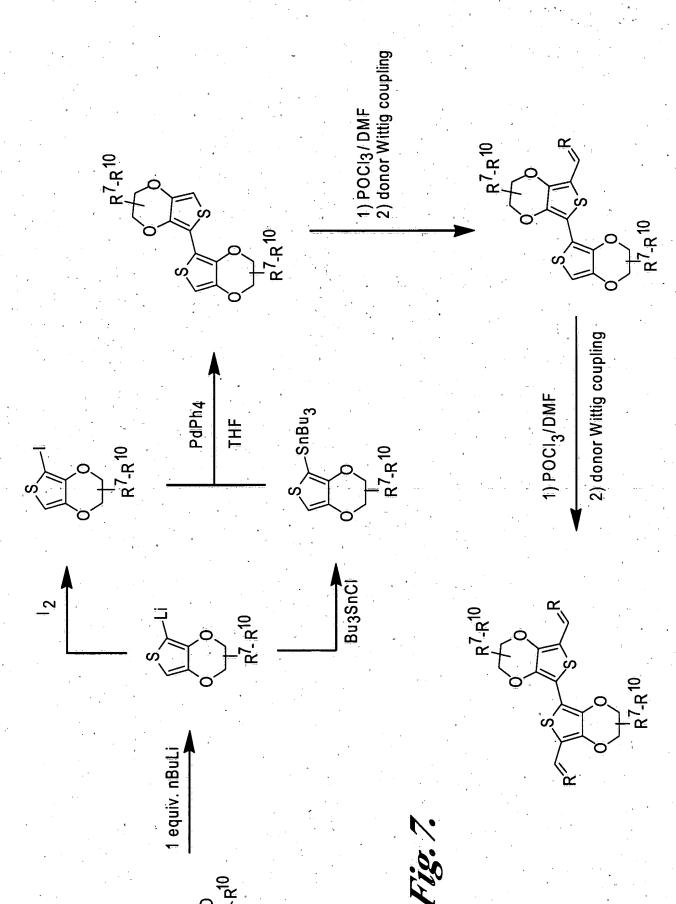
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Fig. 8.

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COOLETHA ABOUCE

POCI₃/DMF

CH₂PPh₃Br

Fig. 9.

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Fig. 10.

Fig.11.

Fig.13.

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Fig. 12.

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$$-Si$$

$$0$$

$$-Si$$

$$0$$

$$NC$$

$$NC$$

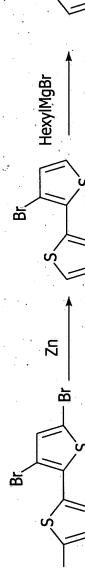
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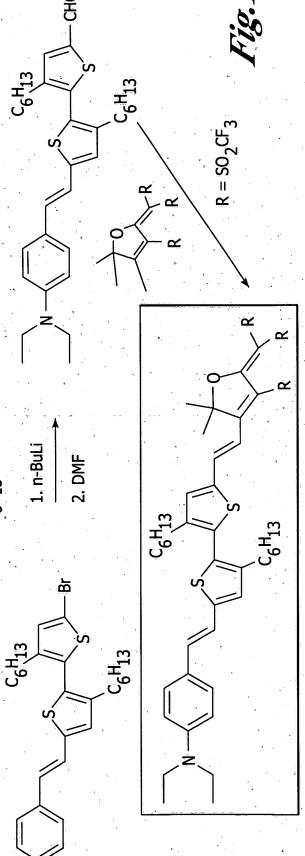
Fig. 14.

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 50_2 CF3

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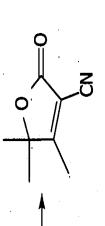
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SO₂CF₃ F₃co₂s⁻



 SO_2CF_3 so₂cF₃ F_3 co₂s $F_3 co_2 s$

 SO_2CF_3

등 - SO_2CF_3

KOH/H₂O/Benzene

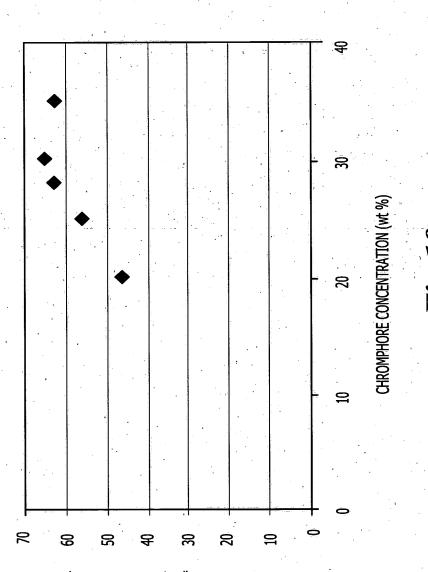
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TBDMSO
$$C_{6}^{H}_{13}$$
 $C_{6}^{H}_{13}$ R R

Fig. 17.

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EO COEFFICIENT (pm / V at 1.3 microns)

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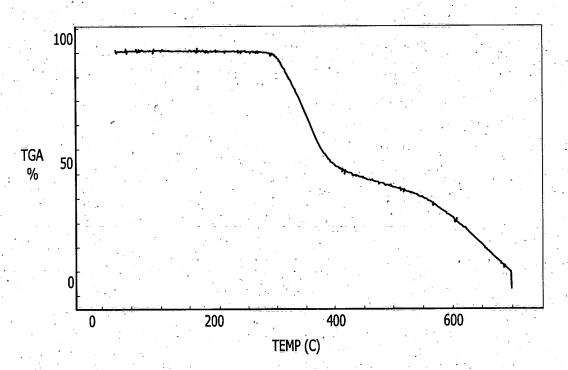
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0 0/ ОН 0 CN 0 = Fig. 22.

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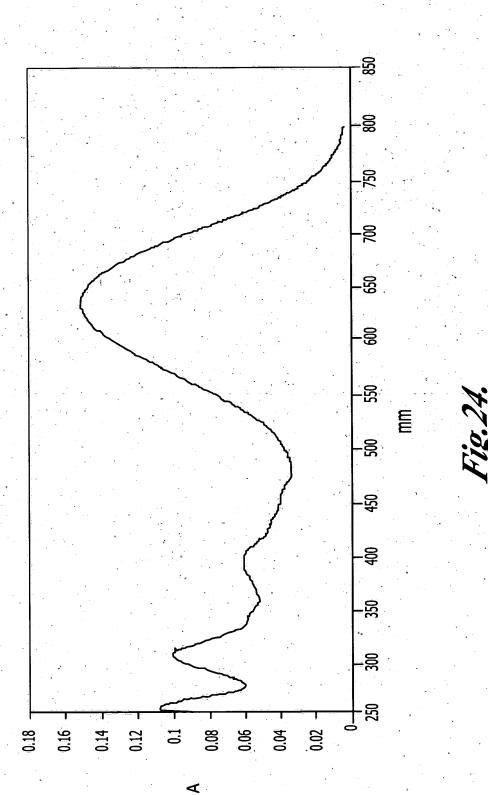


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Fig. 23.

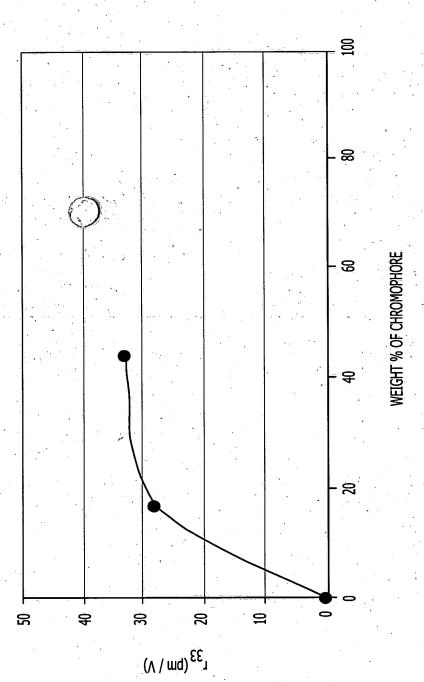
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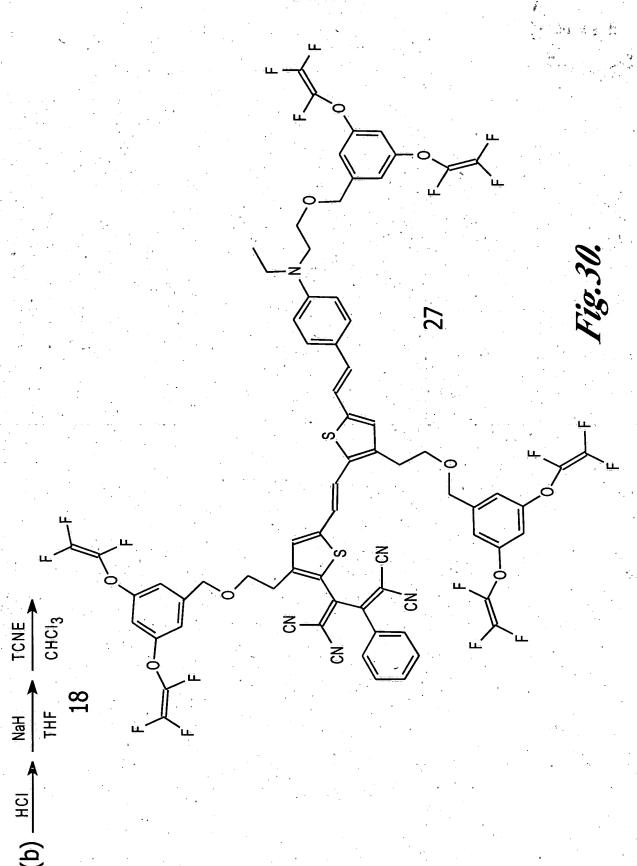
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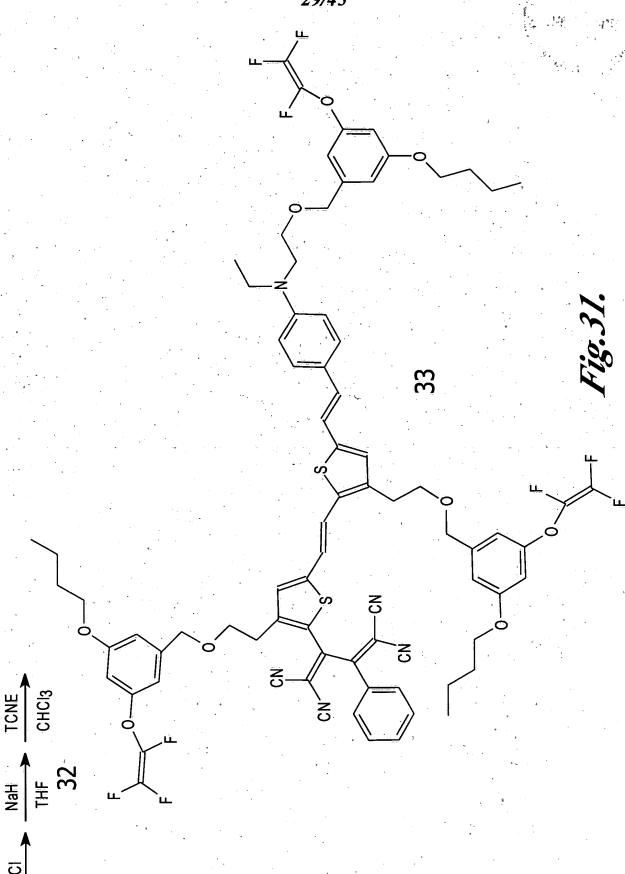
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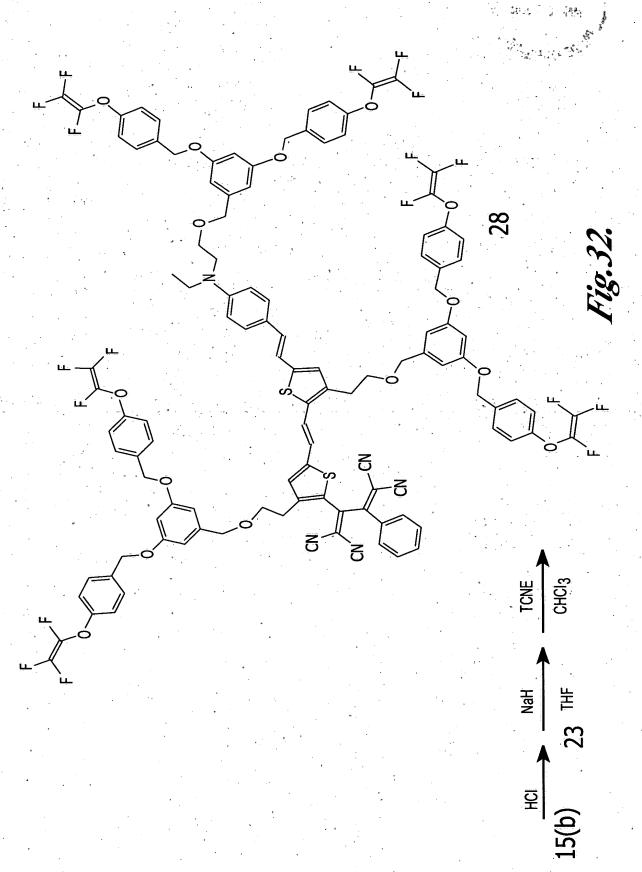
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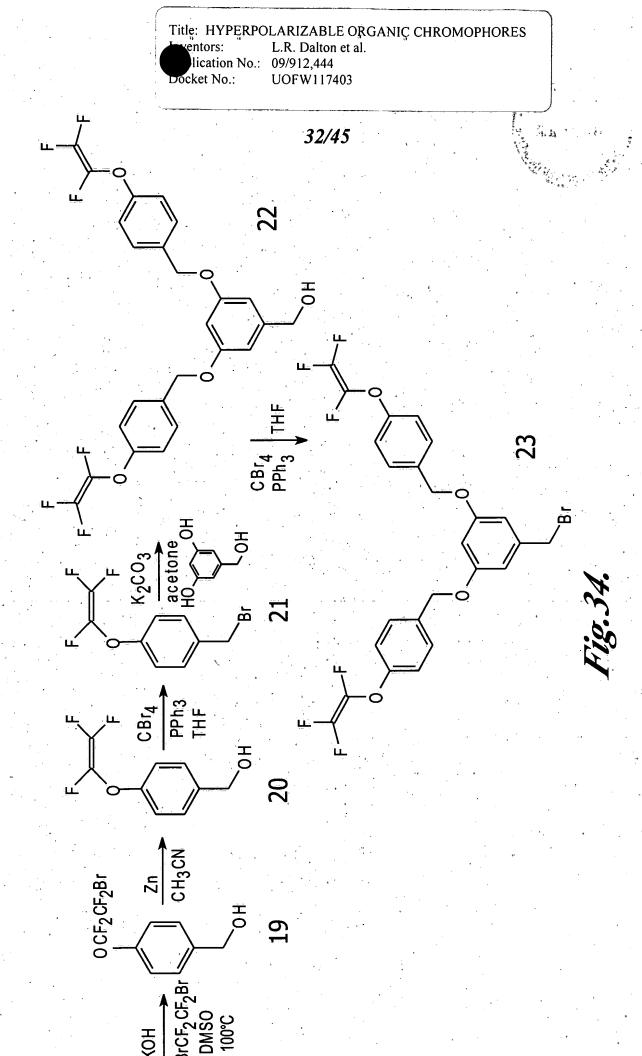
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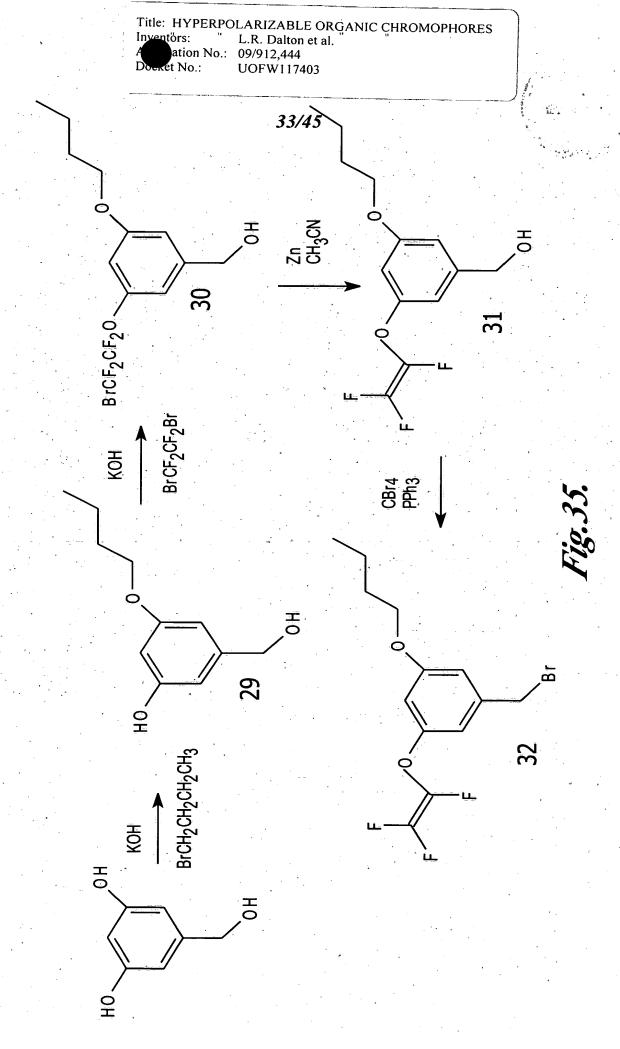


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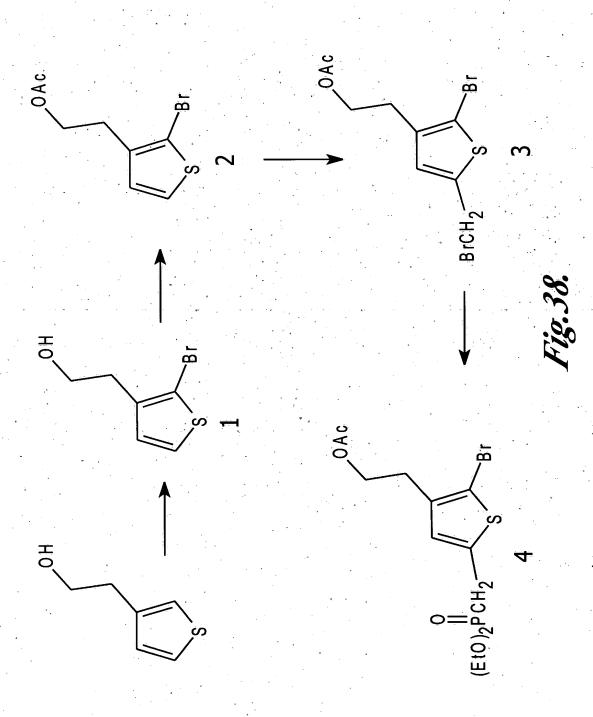
Title: HYPERPOLARIZABLE ORGANIC CHROMOPHORES ntors: L.R. Dalton et al. ication No.: 09/912,444
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OPULETA DECE

Fig. 39.

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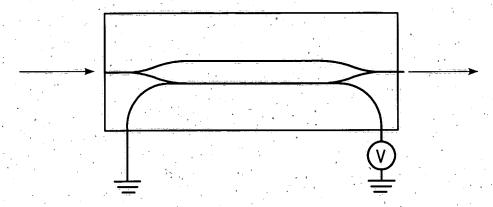
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TBDMSO OTBDMS

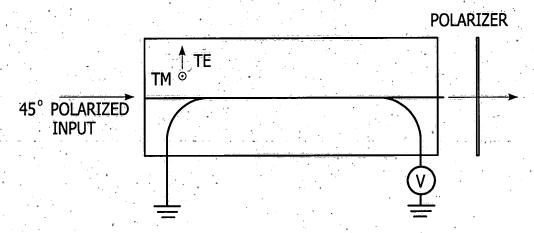
13(a, b)
$$\frac{\text{BuLi, I}_2}{\text{THF}}$$
 $\frac{\text{S}}{-76 \, ^{\circ}\text{C}}$ $\frac{\text{S}}{\text{TBDMSO}}$ 14(a, b)

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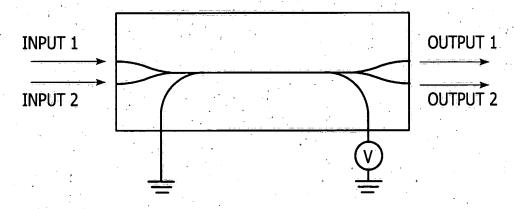
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MACH ZEHNDER MODULATOR



BIREFRINGENT MODULATOR



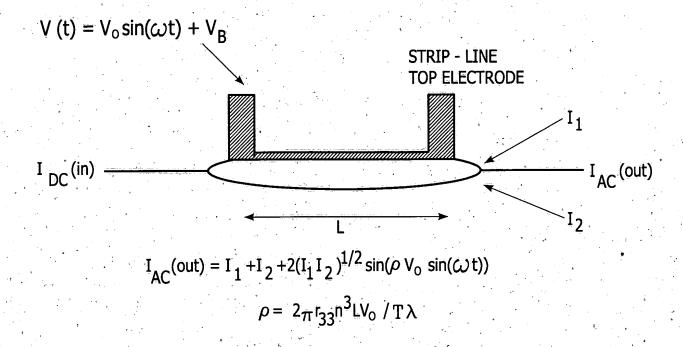
DIRECTIONAL COUPLER

Fig. 42.

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COMPARISON OF KEY FEATURES OF SIMPLE DEVICES

++	MACH ZEHNDER INTERFEROMETER		BIREFRINGENT MODULATOR	DIRECTIONAL COUPLER
r _{eff}	r ₃₃		^r 33 ^{-r} 13	r ₃₃
v_{π}	$V_{\pi MZ}$		1.5 V $_{\pi \text{MZ}}$	1.73 $V_{\pi MZ}$
Mod. Power	P MZ		2.75 P _{MZ}	3 P _{MZ}

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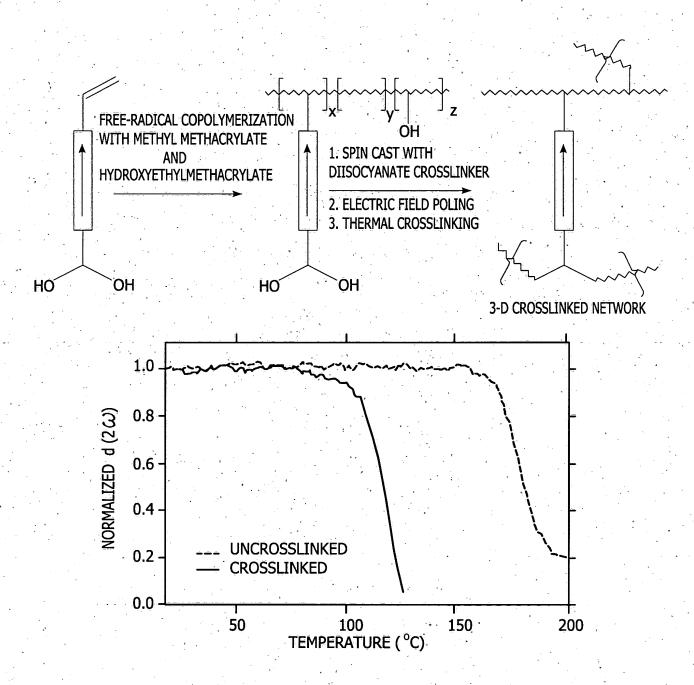


Fig. 44.

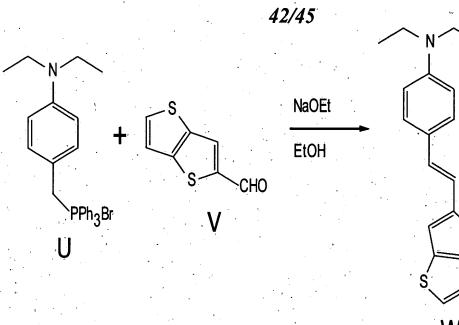


Fig. 45.

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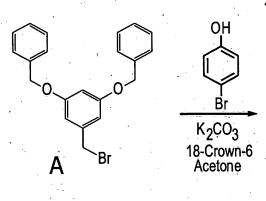
Fig. 46.

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Fig. 47.

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Fig. 48.

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